

USPS-RT-1

BEFORE THE
POSTAL RATE COMMISSION
WASHINGTON, D. C. 20268-0001

POSTAL RATE AND FEE CHANGES, 2006

Docket No. R2006-1

REBUTTAL TESTIMONY
OF
A. THOMAS BOZZO
ON BEHALF OF THE
UNITED STATES POSTAL SERVICE

Table of Contents

List of Tables	ii
Autobiographical Sketch	iii
Autobiographical Sketch	iii
Purpose and Scope of Testimony	1
I. Concerns Raised by Witnesses Heath and Siwek have Minimal Effects for Within-County Tally Identification.	2
I.A. Summary of IOCS Procedures.	2
I.B. Siwek’s Claim that the Postal Service Method Does Not Determine Whether Within-County Rates are Paid is Incorrect.....	5
I.C. Witness Heath’s Interpretation of Regulations Applicable to Non-Subscriber Copies is Faulty and Does Not Point to Significant Tally Assignment Issues.....	7
I.D. Other Critiques by Witnesses Heath and Siwek Do Not Point To Substantial Errors.	11
I.D.1. “Wandering Routes”.	11
I.D.2. Use of Information in Publication Directories.....	13
I.D.3. “Local Appeal” Determination.....	16
I.D.4. Reuse of Previous Hand-check Results.....	17
I.E. Conclusion: Within-County Tally Identifications are Reliable.....	18
II. Witness Siwek’s Pooling Proposal is Inappropriate and Likely to Strongly Bias Within-County Periodicals Costs.....	19
II.A. The Sampling Standard Errors of Within-County Periodicals Costs Are Reasonable Given the IOCS Sample Size and Within-County Cost Shares.....	19
II.B. Witness Siwek’s Analysis of BY 2004 and BY 2005 Confidence Intervals Actually Shows That Pooling Is Inappropriate.....	20
II.C. Witness Siwek’s Pooling Approach is Not a Proper Application of Sequential Sampling.....	22

II.D. Witness Siwek’s Pooling Approach Yields Biased Unit Costs and is Inappropriate.....	23
III. Conclusion	23

List of Tables

Table 1. Nonsubscriber Copies Exceeding 10 Percent Threshold vs. Within-County Volumes: FY 2005 Within-County Tallies	10
Table 2. Variations in Reported Circulation for FY 2005 Titles	15

Autobiographical Sketch

My name is A. Thomas Bozzo. I am a Vice President with Laurits R. Christensen Associates (LRCA), which is an economic research and consulting firm located in Madison, Wisconsin. My education and experience are described in detail in my direct testimony, USPS-T-12 and USPS-T-46. In addition to the general areas of experience previously detailed, I supervise the data processing that determines the final activity codes for Periodicals tallies in the In-Office Cost System (IOCS).

1 **Purpose and Scope of Testimony**

2 The purpose of this testimony is to rebut critiques of the Postal Service
3 method for identifying IOCS tallies for Within-County Periodicals leveled by NNA
4 witnesses Heath and Siwek.

5 In Section I, I summarize the processing procedures employed in the
6 Postal Service methods and demonstrate that the NNA witnesses' criticisms
7 extensively mischaracterize both the methods and the applicable mailing
8 regulations. I show that the variety of the specific issues raised by witnesses
9 Heath and Siwek have no significant effect on the tally classification outcomes.

10 In Section II, I explain why it would be inappropriate to adopt witness
11 Siwek's proposal to pool cost data from BY 2004 and BY 2005 for Within-County
12 Periodicals. While advertised by witness Siwek as a method of reducing the
13 sampling variation in the Within-County Periodicals costs, its effect is to
14 inappropriately delay recognition of the effects of the IOCS redesign on Within-
15 County Periodicals costs. In the absence of a showing that IOCS systematically
16 over identifies Within-County Periodicals to any appreciable extent, witness
17 Siwek's proposal would impart a strong downward bias to measured Within-
18 County Periodicals costs if adopted.

1 **I. Concerns Raised by Witnesses Heath and Siwek have Minimal Effects for**
2 **Within-County Tally Identification.**

3 **I.A. Summary of IOCS Procedures.**

4 In this section, I provide a summary review of the procedures employed in
5 identifying IOCS tallies for Within-County Periodicals, described in Appendix D of
6 USPS-LR-L-9, and their rationale.

7 In contrast to other classes of mail, Periodicals pieces do not normally
8 bear indicia indicating the postage paid. Some (but by no means all) may be
9 marked with the Periodicals class, but identification of Periodicals is based
10 primarily on title and related information entered by the data collectors and
11 checked in subsequent tally processing.¹ Within-County Periodicals identification
12 is further complicated by the absence of markings identifying pieces claiming
13 Within-County rates. Thus, it is necessary to use information other than rate
14 markings to identify Within-County Periodicals pieces sampled in IOCS.

15 Combining IOCS information with information from other data sources, it is
16 possible to make a reliable determination of eligibility to claim Within-County
17 rates. Indeed, the critiques by witnesses Heath and Siwek focus on cases in
18 which pieces that may appear eligible for Within-County rates to the screening
19 procedures actually pay Outside-County rates. (NNA-T-1 at 7-9 [Section I.A.1];
20 NNA-T-3 at 7-8, lines 14-22 and 1-3, respectively.) As I show below, these cases

¹ Curiously, witness Siwek is unable to state that postage paid is not recorded on Periodicals pieces; he suggests only that it “may or may not be.” Tr. 29/9737.

1 do not constitute a significant source of error in the Postal Service's classification
2 process.

3 Once eligibility has been determined, the tally classification follows from
4 the mailer's financial incentive to claim Within-County rates for eligible pieces.
5 The Within-County rates are much lower than the corresponding Outside-County
6 rates, and it is essentially costless for mailers to claim the rates for eligible
7 pieces. Witness Heath agrees that the incentive is very strong. (Response to
8 USPS/NNA-T1-4; Tr. 29/9595.) In effect, mailers who do not claim Within-
9 County rates for eligible pieces are leaving money on the sidewalk.

10 The eligibility determination uses three main processing stages. First, the
11 Postal Service's mainframe processing of the IOCS data identifies candidate
12 Within-County tallies by checking the counties of the entry office and destination
13 for Periodicals titles. However, this processing does not consider other eligibility
14 criteria.

15 In the next stage, the Periodicals tallies resulting from the mainframe
16 processing are linked with mailing statement data from the PostalOne! system
17 where possible. Most tallies (83 percent of the tallies with final Within-County
18 activity codes; USPS-LR-L-9 (revised 7/10/06), Appendix D, hand2005.xls,
19 worksheet 'Final Counts'; see also the response to NNA/USPS-T1-16; Tr.
20 10/2402) are resolved at this stage by determining whether the mailer entered
21 any copies at Within-County rates. If not, an Outside-County code is assigned; if
22 so, a Within-County code is assigned to pieces addressed to the county of origin,
23 and an Outside-County code is assigned otherwise. In the former case, the

1 sampled publication is either ineligible or the mailer otherwise did not actually
2 use Within-County rates. In the latter, the “eligibility” of the publication is
3 determined from the mailer’s actual use of the rates, and thus goes beyond
4 checks of simple eligibility as claimed by witness Siwek (NNA-T-1 at 5-6 [Section
5 VI.a]).

6 Where PostalOne! data are not available, the publication title is
7 researched for evidence of eligibility to mail at Within-County rates under the
8 circulation criteria in DMM 707.11.3.1. In nearly all such cases, the circulation
9 and some characterization of content is determined from directories of
10 publications. If the title is determined likely to qualify for Within-County rates
11 under DMM 707.11.3.1, then tallies of pieces addressed to the county of origin
12 are assigned Within-County activity codes. Results of previous checks may be
13 re-used for up to two years. Finally, any tallies for which no information is
14 available retain the activity code from the original mainframe processing.

15 The effect of these tiers of processing are that we use the most dispositive
16 available data—from mailing statements—where possible (the vast majority of
17 tallies), and make reasonable use of available information otherwise. These
18 provide an accurate means for identifying Within-County Periodicals tallies, and
19 given the opportunity to do so, witness Siwek did not identify any specific errors
20 among the 193 tallies assigned Within-County activity codes (response to
21 NNA/USPS-T3-6(c); Tr. 29/9674).

1 **I.B. Siwek's Claim that the Postal Service Method Does Not Determine**
2 **Whether Within-County Rates are Paid is Incorrect.**

3 Witness Siwek's most pointed critique of the Postal Service methods for
4 identification of Within-County Periodicals tallies is:

5 Rather than assessing whether the mailer actually paid Within-
6 County rates, the USPS purported to determine whether the
7 publisher was eligible to claim Within-County rates. By choosing to
8 ignore actual postage payments and to focus only on eligibility, the
9 USPS has introduced the possibility that the Within-County pieces
10 that it analyzed were eligible for Within-County rates but were not
11 assessed postage at those preferred rates. (NNA-T-3 at 6, lines 2-
12 6, footnote omitted.)

13 At the publication level, witness Siwek is simply incorrect. By way of support for
14 his claim, witness Siwek cites my response to NNA/USPS-T46-11 (Tr. 9/2340;
15 NNA-T-1 at 6, lines 2-3), in which I confirmed that "if a tally has been reviewed
16 for evidence of eligibility to claim Within-County rates and if evidence has been
17 found to support that claim, that the Postal Service then assumes, in all such
18 cases, that the postage for that underlying piece was actually calculated at
19 Within-County Rates." However, as the review of methods in the previous
20 section should make clear, the primary source of eligibility information is in fact
21 the actual mailing of copies at Within-County rates, as evidenced by mailing
22 statement data. While it should be safe to infer eligibility from the use of Within-
23 County rates, the actual use of the rates is the information that is used to assign
24 Within-County activity codes when available.

25 Nor is witness Siwek correct in implying that the Postal Service method
26 would misclassify pieces if a mailer eligible to use Within-County rates for some
27 reason claimed only Outside-County Rates (NNA-T-1 at 6, lines 4-9). If the

1 mailing statement data for a publication indicate that the mailer solely used
2 Outside-County rates, any tallies for that publication are assigned Outside-
3 County Periodicals activity codes regardless of possible eligibility.

4 Witness Siwek's concerns, admittedly, extend to the ability to identify the
5 use of Within-County rates at the issue or even the individual piece level.
6 However, witness Siwek adduces no evidence at all that mailers fail to claim
7 Within-County rates on individual pieces for which they are eligible to do so.
8 Asked to identify any quantitative information he might have on issue-by-issue
9 variation in Within-County eligibility, witness Siwek admits to having none
10 (response to USPS/NNA-T3-8; Tr. 29/9677). Witness Heath indicates that he is
11 not aware of any instance in which any of his publications lost, gained or
12 regained Within-County eligibility (response to USPS/NNA-T1-3; Tr. 29/9594).
13 Nor is witness Siwek aware of any circumstances in which a mailer would not
14 claim a Within-County rate for an eligible piece (response to USPS/NNA-T3-5(c);
15 Tr. 29/9673). Indeed, witness Siwek narrows his critique to a set of specific
16 cases in which individual nonsubscriber pieces appear to be eligible for Within-
17 County rates but actually are paid at Outside-County rates. (Id.) However, as
18 witness Siwek admits, the ability to employ Within-County rates for nonsubscriber
19 pieces is not determined on an issue-by-issue basis. Tr. 29/9767. I address
20 these cases in the following sections.

1 **I.C. Witness Heath's Interpretation of Regulations Applicable to Non-**
2 **Subscriber Copies is Faulty and Does Not Point to Significant Tally**
3 **Assignment Issues.**

4 NNA witness Heath purports to identify several categories of mailpieces
5 that might appear to be Within-County pieces in the Postal Service analysis but
6 which nevertheless may pay Outside-County rates. NNA-T-1 at 8-9; USPS/NNA-
7 T1-6, Tr. 29/9597. However, witness Heath's analysis depends critically upon a
8 mischaracterization of the Domestic Mail Manual (DMM) regulations applicable to
9 the categories of pieces he identifies. Specifically, witness Heath erroneously
10 leaps from regulations that identify the pieces in question as *non-subscriber*
11 copies to the conclusion that those pieces must be mailed at Outside-County
12 rates. In fact, nonsubscriber pieces that otherwise qualify may be mailed at
13 Within-County rates within certain limitations, per DMM 707.9.3 and 707.11.3.3.
14 Effectively, non-subscriber copies up to 10 percent of the total number of copies
15 mailed at Within-County rates to subscribers during the current year may also be
16 mailed at Within-County rates.

17 Heath's categories are as follows:

- 18 • Complimentary copies. Heath claims "They would be required to travel at
19 outside County rates." NNA-T-1 at 8, lines 26-27. In fact, DMM 707.7.9
20 states "All complimentary copies... are considered nonsubscriber or
21 nonrequester copies subject to the corresponding rates."
- 22 • Expired subscription copies. Heath claims:
23 Under DMM 708.7.6 [sic] that lapsed subscriber can be carried at
24 Within-County rates for six months. At the conclusion of six months,
25 the subscriber may remain on the list so long as the paid circulation

1 eligibility is not violated, but must be mailed at Outside-County
2 rates. (NNA-T-1 at 9, lines 3-7.)

3 Heath is correct that for six months, the pieces may be mailed at the “rates
4 applicable to subscriber copies” (DMM 707.7.6). However, after six months,
5 such pieces would simply constitute non-subscriber “complimentary copies,”
6 so Heath is again mistaken in suggesting that the pieces “must be mailed” at
7 Outside-County rates.

- 8 • Advertising copies. Heath claims “Under DMM 707.7.3, these copies are
9 required to travel at the outside County postage rate as well.” NNA-T-1 at 9,
10 lines 12-13. DMM 707.7.3 actually states “Copies paid for by advertisers or
11 others for advertising purposes are nonsubscriber or nonrequester copies...
12 Those copies are subject to the applicable rates for nonsubscriber or
13 nonrequester copies.”

14 Thus, none of the non-subscriber copy issues raised by witness Heath
15 necessarily pose a problem for Within-County tally identification. As long as a
16 publisher is eligible to do so under DMM 707.11.3.3, it would have much the
17 same incentive to employ the markedly lower Within-County rates for non-
18 subscriber pieces as for subscriber pieces.

19 The practical issue is whether there is a significant volume of non-
20 subscriber copies exceeding the limitations that force the use of Outside-County
21 rates. Clearly, the potential problem is greater the more prevalent non-
22 subscriber copies exceeding the 10 percent limit are relative to the corresponding
23 Within-County volumes.

1 Witness Heath agrees that fewer nonsubscriber pieces exceeding the
2 allowance reduces the potential for misclassifying Within-County tallies in IOCS.
3 Tr. 29/9650. While witness Heath opines without proof that such pieces are not
4 measurable (response to NNA/USPS-T1-6(c); Tr. 29/9597), the Periodicals
5 mailing statement provides for the identification of nonsubscriber copies, and
6 separately identifies copies exceeding the 10 percent limit and thus ineligible for
7 Within-County rates. Thus, I obtained from PostalOne! the reported copies
8 exceeding the 10 percent limit, as well as the total Within-County copies, for the
9 titles included in the IOCS Within-County tally sample. The aggregate data are
10 reported in Table 1, below.

1 **Table 1. Nonsubscriber Copies Exceeding 10 Percent Threshold vs. Within-**
 2 **County Volumes: FY 2005 Within-County Tallies**

FY 2005 IOCS Titles in PostalOne!		
Within-County Copies	Nonsubscriber Copies Exceeding 10% Threshold	Nonsubscriber Copies Exceeding Threshold, % of Within-County
46,405,088	36,418	0.1%

3
 4 For the FY 2005 IOCS sample titles reported in the PostalOne! system,
 5 the number of copies subject to witness Heath's concerns is trivial, and so the
 6 likelihood of tally misidentification due to them is accordingly remote.

7 Witness Heath contends that mailers "reserve" their eligibility to mail
 8 pieces at the lower Within-County rates. However, he agrees that mailers who
 9 do not reach the limit would pay Within-County rates as applicable. Tr. 29/9648.
 10 Witness Siwek also states that mailers within the 10 percent limit would be able
 11 to claim Within-County rates for eligible nonsubscriber pieces. Tr. 29/9771. In
 12 fact, the data indicate that relatively few pieces are mailed under conditions
 13 where the mailer might be inclined to "reserve" the use of Within-County rates.
 14 For that matter, it would appear that if a mailer expected to exceed the threshold,
 15 its best strategy would be to employ Within-County rates up front to the extent
 16 allowed by regulation, to ensure that it fully employed the lower rates.

17 It may be noted, though, that a few titles (none of which appear in the FY
 18 2005 IOCS Within-County tally set) do individually report large fractions of non-
 19 subscriber copies exceeding the 10 percent limit relative to Within-County copies.
 20 If the need to do so is identified, it would be possible to identify such titles in the
 21 course of tally processing and to develop special procedures for classifying them
 22 to reduce the possibility of error.

1 **I.D. Other Critiques by Witnesses Heath and Siwek Do Not Point To**
2 **Substantial Errors.**

3 Witnesses Heath and Siwek raise other cases in which, they contend,
4 tallies of pieces actually paying Outside-County rates may be assigned Within-
5 County activity codes. These contentions lack practical substance, as I discuss
6 below.

7 **I.D.1. “Wandering Routes”.**

8 Witness Heath’s “Wandering Routes” issue represents a potential problem
9 similar to those discussed in Section I.C, above. While witness Heath’s term
10 refers to delivery routes that may cross county boundaries, the underlying issue
11 is that the mapping between 5-digit ZIP Codes and counties used to determine
12 whether the delivery address is in the same county as the entry office is not
13 dispositive. Since the Within-County activity code assignment uses the “main”
14 county associated with the 5-digit ZIP Code, the process is subject to error if the
15 delivery address of an otherwise-eligible piece happens to be in a portion of the
16 ZIP Code outside the county of origin. Witness Heath, however, concedes that
17 the issue is likely to be “small” (NNA-T-1 at 8, line 2).

18 It is, in fact, possible to confirm that the “wandering routes” effect is small
19 by examining finer ZIP Code detail. While the 5-digit ZIP Code does not uniquely
20 identify counties, my understanding is the 9-digit ZIP Code identifies segments of
21 routes located entirely within one county. It is also my understanding that the 9-
22 digit ZIP Code is the addressing level at which Within-County rate eligibility is
23 determined by mailers for individual pieces. The prevalence of 9-digit ZIP Codes

1 outside the “main” county of the 5-digit ZIP Code provides a rough indication of
2 the extent of the “wandering routes” problem.

3 For the 180 unique five-digit ZIP Codes to which the pieces classified as
4 Within-County Periodicals in the FY 2005 IOCS sample were sent, there are
5 498,036 9-digit ZIP Codes, of which 490,532 (98.5 percent) correspond to the
6 “primary” county. Thus, if mail volumes and addresses were assumed uniformly
7 distributed over 9-digit ZIP Codes, the potential would be for a maximum 1.5
8 percent error, which confirms that the likely magnitude of the problem is small.

9 However, there is good reason to believe that the actual error is much
10 smaller than 1.5 percent. In densely populated areas, 5-digit ZIP Codes’
11 geographic extents are commonly entirely within county boundaries. It is also
12 common that population densities are relatively low near county boundaries—i.e.,
13 where towns and other municipalities are located in the interior of counties rather
14 than straddling the county line. Towns also tend to be less densely populated on
15 their outskirts. Thus, it is reasonable to assume that addresses are not uniformly
16 distributed over the “wandering” and “non-wandering” portions of delivery routes,
17 such that addresses will be concentrated in the 9-digit ZIP Codes associated with
18 the primary county.

19 The “wandering routes” issue is amenable to longer-term solution. My
20 understanding is that witness Heath had discussed possibilities for resolving the
21 issue in the future, such as by obtaining images on the mailpiece or employing
22 other markings. (Tr. 29/9658.) It would appear that the issue could be solved by
23 collecting the nine-digit ZIP Code for Periodicals pieces sampled in IOCS. Given

1 that this is the level at which the geographic criterion for Within-County rate
2 eligibility is determined, doing so would eliminate the county-assignment
3 ambiguity in the current methods based on the 5-digit ZIP Code. My
4 understanding is that the Postal Service intends to modify the IOCS data
5 collection instrument accordingly. In the meanwhile, the likely effect appears
6 quite small.

7 **I.D.2. Use of Information in Publication Directories.**

8 Witness Siwek claims that circulation information obtained by the Postal
9 Service for publications lacking PostalOne! mailing statement data are
10 insufficiently timely (NNA-T-3 at 7, lines 3-13). This criticism assumes that
11 affected publications' circulations experience substantial short-term variation.

12 The general procedure in the edit process is to use the most recent
13 available directories. Since the directory publication dates are close to the IOCS
14 production deadlines, it sometimes is not possible to employ the current year's
15 directory. Insofar as witness Siwek admits to having no more current sources for
16 circulation information (response to NNA/USPS-T3-9(c), Tr. 29/9678; Tr.
17 29/9747), the question amounts to whether the most recent available information
18 is recent enough.

19 Witness Siwek overstates his case for the vintage of the circulation
20 information. He specifically cites the use of the 139th (2004) edition of the Gale
21 Directory of Publications, published in September, 2004, claiming it "at best
22 contained circulation data for 2003," implying that the data may be two years out-

1 of-date. (NNA-T-3 at 7, line 9.) Witness Siwek appears to confuse calendar and
2 fiscal years in the course of his discussion.

3 I learned from Thomson Gale staff that requests for updated information
4 are sent approximately November 1 of the year prior to the edition data, and the
5 deadline for updated information is approximately May 1 of the edition's year of
6 publication. In the case of Gale's 139th edition, this period is within FY 2004
7 (beginning October 1, 2003), so the Gale information is not as old as witness
8 Siwek implies. Witness Siwek's critique collapses in the case of the Bowker's
9 News Media Directory, since calendar year 2004 data are not obviously
10 inapplicable to FY 2005 (beginning October 1, 2004).

11 The most important practical question is whether the availability of more
12 recent circulation data would affect the assignments of affected tallies. Contrary
13 to witness Siwek's assertion in response to NNA/USPS-T3-9 (Tr. 29/9678), it is
14 straightforward to check the extent to which reported circulation figures vary over
15 time. As shown in Table 2, below, few titles show any material variation in the
16 circulation of the titles subject to directory checks over the last several years.
17 The exception, the Gonzales Tribune, is discussed below. This result should not
18 be surprising, as it would stand to reason that publications with small circulations
19 limited by local appeal or esoteric subject matter would not normally experience
20 wide swings in circulation. Further, publications with primarily local appeal are
21 unlikely to experience frequent changes in eligibility for Within-County rates.
22 Accordingly, the critique has no practical substance.

1 **Table 2. Variations in Reported Circulation for FY 2005 Titles**

Publication	Year				
	2002	2003	2004	2005	2006
ONE VOICE	19,200 /6	19,500 /7	19,500 /8	19,500 /9	19,500 /10
ARKANSAS BANKER	2,000 /1	2,000 /2	2,000 /3	2,000 /4	2,000 /5
FORT BRAGG ADVOCATE-NEWS	5,400 /1	5,400 /2	5,400 /3	5,400 /4	5,400 /5
GONZALES TRIBUNE	840 /6	840 /7	840 /8	13,000 /11	13,000 /12
CALAVERAS ENTERPRISES	5,300 /1	5,300 /2	5,300 /3	5,800 /4	5,800 /5
THE NEW LONDON JOURNAL	1,092 /1	1,092 /2	1,092 /3	1,092 /4	N/A
CLYDE REPUBLICAN	1,000 /1	1,000 /2	1,000 /3	1,000 /4	1,000 /5
SOUTHWEST DAILY TIMES	6,829 /1	6,829 /2	6,829 /3	6,829 /4	6,829 /5
TONGANOXIE MIRROR	2,500 /1	2,500 /2	2,500 /3	2,500 /4	2,500 /5
TRI COUNTY NEWS	1,375 /1	1,375 /2	1,375 /3	1,375 /4	1,375 /5
LAKE CITY GRAPHIC	3,200 /1	3,200 /2	3,200 /3	3,200 /4	3,200 /5
LICKING NEWS	2,500 /1	2,500 /2	2,500 /3	2,500 /4	2,500 /5
POST TELEGRAPH	2,670 /1	2,670 /2	2,670 /3	2,670 /4	2,670 /5
SMITHVILLE LAKE HERALD (THE)	2,600 /1	2,600 /2	2,600 /3	2,600 /4	2,600 /5
THE FRANKLIN PRESS	9,200 /1	9,200 /2	9,200 /3	9,200 /4	9,200 /5
THE ALAMANCE NEWS	6,065 /1	6,065 /2	6,065 /3	6,065 /4	7,100 /12
DODGE CRITERION	1,100 /1	1,100 /2	1,051 /3	1,051 /4	1,051 /5
AMITYVILLE RECORD	2,850 /1	2,850 /2	2,850 /3	2,850 /4	2,850 /5
THE JEWISH WEEK	110,000 /6	110,000 /7	110,000 /8	90,000 /9	90,000 /10
BALDWIN HERALD	4,600 /6	5,500 /7	5,500 /8	5,500 /9	5,500 /10

Table 2, Cont'd Publication	Year				
	2002	2003	2004	2005	2006
SAVOY	200,000 /1	200,000 /2	325,000 /3	325,000 /4	325,000 /5
BURNS TIME HERALD	3,000 /1	3,000 /2	3,000 /3	3,000 /4	3,000 /5
DRAIN ENTERPRISE	1,300 /1	1,300 /2	1,300 /3	1,300 /4	1,300 /5
CHERAW CHRONICLE	6,724 /1	8,050 /2	8,050 /3	8,050 /4	8,050 /5
THE PRESS AND STANDARD	7,000 /1	7,000 /2	7,000 /3	7,000 /4	6,500 /12
GAZETTE	8,800 /1	8,800 /2	8,800 /3	8,800 /4	8,800 /5
CHILTON TIMES JOURNAL	5,400 /1	5,400 /2	5,400 /3	4,500 /4	4,500 /5
RICHLAND OBSERVER	4,000 /1	4,000 /2	4,000 /3	4,000 /4	4,000 /5

Notes

1/ *Gale Directory of Publications 136th Edition* (2002)

2/ *Gale Directory of Publications 137th Edition* (2003)

3/ *Gale Directory of Publications 139th Edition* (2004)

4/ *Gale Directory of Publications 140th Edition* (2005)

5/ *Gale Directory of Publications 141st Edition* (2006)

6/ *Bowker's News Media Directory 52nd Edition* (1) 2002

7/ *Bowker's News Media Directory 53rd Edition* (1) 2003

8/ *Bowker's News Media Directory 54th Edition* (1) 2004

9/ *Bowker's News Media Directory 55th Edition* (1) 2005

10/ *Bowker's News Media Directory 56th Edition* (1) 2006

11/ *Ulrich's Periodicals Directory 44th Edition* (2006)

12/ *Ulrich's Periodicals Directory Online Edition*, www.ulrichsweb.com

1 **I.D.3. "Local Appeal" Determination.**

2 Witness Siwek objects to the classification of the tally for the Gonzales
3 Tribune as Within-County based on the assumed local appeal of the publication
4 (NNA-T-3 at 9, lines 14-21), though he does not specifically claim that it actually
5 was ineligible or otherwise did not claim Within-County rates (response to
6 USPS/NNA-T3-13(a); Tr. 29/9682).

7 The "local appeal" criterion is rarely used, since most publications
8 requiring circulation lookups report circulations under the 10,000 copy limit. In

1 the case of the Gonzales Tribune, the circulation lookup showed this title's
2 circulation to be 13,000, but also identified it as a community newspaper. This
3 suggests that the circulation was likely to be geographically limited. The
4 masthead graphic on the paper's web site (<http://www.kingcityrustler.com/>,
5 accessed October 17, 2006) indicates the Gonzales Tribune and affiliated
6 publications as specifically "Serving South Monterey County since 1901." Thus,
7 we considered it reasonable to assume that the Gonzales Tribune's circulation
8 was likely concentrated in Monterey County, California sufficiently to permit it to
9 mail at Within-County rates.

10 I directed a member of my staff to call the Gonzales, CA post office to
11 verify whether the Gonzales Tribune does in fact routinely employ Within-County
12 rates. The postmaster reported that it does. Thus, the tally appears to have
13 been classified correctly.

14 **I.D.4. Reuse of Previous Hand-check Results.**

15 Witness Siwek also objects to the classification of the tallies based on the
16 outcome of previous years' checks (NNA-T-3 at 9, lines 5-9). As with other
17 criticisms discussed above, witness Siwek offers no evidence that the affected
18 tallies were misclassified (response to USPS/NNA-T3-12(b); Tr. 29/9681).

19 It should be noted that this criterion only applies to tallies where it is not
20 possible to link PostalOne! mailing statement data—37 tallies were subject to it in
21 FY 2005 (USPS-LR-L-9; Appendix D; workbook 'hand2005.xls'; worksheet
22 'Further Checks (2)'). This practice was adopted on the basis of our experience

1 over the course of our work that the underlying data change very slowly for
2 affected tallies; this is borne out by Table 2, above. In addition, the tallies subject
3 to this criterion were re-checked using current sources, and the current data did
4 not overturn the previous classifications in any instance. Again, there is no
5 indication that the Postal Service method ignores material dispositive data.

6 **I.E. Conclusion: Within-County Tally Identifications are Reliable.**

7 NNA witnesses Heath's and Siwek's critiques of the Within-County tally
8 identification process rest on the assertion that a significant number of
9 Periodicals tallies might appear to be eligible for Within-County rates but actually
10 pay Outside-County rates. However, quantification of the factors identified by
11 witnesses Heath and Siwek shows the effects to be *de minimis*. Contrary to
12 witness Siwek's claim that there is "no cost data" for Within-County Periodicals
13 (NNA-T-3 at 10), the Postal Service makes good use of the available data to
14 identify Within-County Periodicals, and should be able to eliminate the main
15 remaining source of potential error with incremental modifications to its current
16 procedures. In the absence of demonstrated tally identification error, the
17 additional cost remedies recommended by witness Siwek are grossly
18 inappropriate (see Section II, below).

1 **II. Witness Siwek's Pooling Proposal is Inappropriate and Likely to Strongly**
2 **Bias Within-County Periodicals Costs.**

3 **II.A. The Sampling Standard Errors of Within-County Periodicals Costs Are**
4 **Reasonable Given the IOCS Sample Size and Within-County Cost Shares.**

5 Witness Siwek claims that the cost estimates for Within-County
6 Periodicals exhibit CVs "well beyond acceptable levels," citing a sampling
7 textbook for support. (NNA-T-3 at 16, lines 15-19.) Witness Siwek badly
8 misinterprets his source, however, and his conclusion is therefore incorrect.

9 Witness Siwek quotes a textbook by Prof. Sharon Lohr as indicating that
10 "“For many surveys of people in which a proportion is measured, $e = 0.03$ [the
11 margin of error, or MOE] and $\alpha = 0.05$ [the significance level associated with the
12 margin of error].” (*Id.*, footnote 33). This is true enough, but a significant detail
13 witness Siwek omits is that in most such surveys, the proportions being
14 measured are relatively large, as in political opinion surveys in which the
15 proportion (supporters of candidate X) is often close to 0.5. If the survey
16 estimate is 0.5, and the sampling MOE is 0.03, then the coefficient of variation
17 (CV) is about 3 percent. If the estimated proportion is 0.34, again with a 3
18 percentage point MOE, the CV is approximately 4.5 percent.

19 I did not pick the example of the 0.34 proportion by accident. It is the
20 proportion of mail processing volume-variable costs (VVC), using the Postal
21 Service method, for single-piece First-Class Mail in Dr. Czigler's table of mail
22 processing CVs (USPS-T-1 at 14). Note that the *actual* IOCS CV is 0.64
23 percent. In fact, the relative MOEs of the IOCS-based mail processing costs are
24 under two percent for the two largest subclass categories (Standard Regular is

1 the next largest category, representing 23 percent of VVC; *Id.*). Given the
2 proportions of the subclass costs, IOCS easily exceeds the “standard” cited by
3 witness Siwek.

4 Within-County Periodicals is indisputably a small subclass, representing
5 less than 0.2 percent of mail processing VVC and 0.3 percent of the CARMM
6 VVC for Cost Segment 6.1. (*Id.* at 15.) Nevertheless, the CVs on the Within-
7 County Periodicals costs for C/S 3.1 and C/S 6.1 are, respectively, 11.58 percent
8 and 11.66 percent. A survey with a three percentage point margin of error could
9 only yield CVs of those magnitudes for much larger proportions—approximately
10 13 percent or more. Again, IOCS actually performs better than the “standard” set
11 by witness Siwek.

12 **II.B. Witness Siwek’s Analysis of BY 2004 and BY 2005 Confidence**
13 **Intervals Actually Shows That Pooling Is Inappropriate.**

14 As a prelude to his recommendation to pool BY 2004 and BY 2005 Within-
15 County Periodicals costs, witness Siwek shows that the BY 2005 cost estimate
16 falls outside the 95 percent confidence interval for the BY 2004 costs. (NNA-T-3
17 at 12.) Reducing the sampling variation in the IOCS estimates would only serve
18 to reinforce that result.

19 Given that the BY 2005 Within-County cost estimate clearly falls outside
20 the confidence interval for the BY 2004 estimates, witness Siwek should
21 conclude that the differences in the results do not represent differences due to
22 sampling error, and that the FY 2004 and FY 2005 IOCS samples are drawn
23 from different populations. Indeed, witness Siwek seems to be searching for a

1 “known extraordinary event” (Id. at 4, line 2) that would explain the results, and
2 fails to consider the redesign of the IOCS data collection instrument (response to
3 USPS/NNA-T3-1; Tr. 29/9668). While witness Siwek apparently was looking for
4 operational changes, the measurement methodology cannot be neglected.

5 Witness Siwek agrees that it is not appropriate to pool data from two
6 distinct populations when they are significantly different. (Response to
7 USPS/NNA-T3-17; Tr. 29/9685.) Since BY 2005 costs are significantly higher
8 than BY 2004, he should also agree that it is not appropriate to pool these two
9 years’ data.

10 The evidence, as stated in my direct testimony (USPS-T-46 at 35) is that
11 the FY 2005 IOCS questionnaire is better able to identify relatively obscure
12 Periodicals titles, including (though not limited to) Within-County Periodicals.
13 While the pre-testing of the FY 2005 IOCS questionnaire could not provide
14 sufficient granularity to identify error rates for Within-County Periodicals, it did
15 show that none of the sampled non-Periodicals pieces were misidentified as
16 Periodicals. In short, there is no evidence of errors that would unjustifiably
17 increase Periodicals costs on the data collection end of the IOCS process in BY
18 2005.²

19 Since Section I, above, demonstrates the absence of statistically or
20 qualitatively significant error in the Periodicals subclass assignment process, the
21 appropriate conclusion is that Within-County Periodicals costs have previously

² Notwithstanding the lack of testing specific to Within-County Periodicals to which witness Siwek objects, the IOCS design changes involved much more extensive testing than the FY/BY 2004 data he seeks to re-introduce.

1 been understated. Accordingly, pooling the BY 2004 and BY 2005 costs would
2 also understate Within-County Periodicals costs, thus introducing an
3 inappropriate bias.

4 **II.C. Witness Siwek's Pooling Approach is Not a Proper Application of**
5 **Sequential Sampling.**

6 Witness Siwek describes his pooling methodology as an application of
7 “sequential sampling.” (NNA-T-3 at 17 lines 7-11.) However, in common
8 statistical usage, sequential sampling employs a relatively small sample to obtain
9 a preliminary estimate of a quantity of interest (*e.g.*, an unknown proportion
10 sought by a survey). The preliminary estimate is then used to determine the
11 sample size needed to obtain a desired MOE for the result. However, witness
12 Siwek shows no interest in using a sequential sample to inform a subsequent
13 sampling plan. He does not state a desired MOE for Within-County Periodicals,
14 other than that which the IOCS estimate already improves upon, as discussed in
15 Section II.A, above. He does not use the BY 2004 data to propose a new sample
16 size that would be appropriate for estimating costs for Within-County Periodicals
17 (response to USPS/NNA-T3-16). His analysis, discussed above, shows that BY
18 2004 and BY 2005 have significantly different estimated costs, which would also
19 preclude the use of sequential sampling. Given these omissions, it appears that
20 witness Siwek is primarily interested in pooling cost data from BY 2004 together
21 with BY 2005 simply to reduce the estimated unit cost, rather than using a true
22 sequential sampling method for its usual purpose.

1 **II.D. Witness Siwek's Pooling Approach Yields Biased Unit Costs and is**
2 **Inappropriate.**

3 Witness Siwek agrees that “[i]deally FY2005 estimated costs should
4 reflect the FY2005 population of mail processed by FY2005 Postal Service
5 operations.” (Response to USPS/NNA-T3-17(b), Tr. 29/9685). His arguments
6 that data from multiple years should be pooled together, addressed above, are
7 inadequate to overturn this general principle. Indeed, witness Siwek's own
8 analysis, properly interpreted, shows that the BY 2004 IOCS data are not
9 estimating the same quantities as the improved BY 2005 IOCS data. Therefore it
10 is inappropriate to use BY 2004 data when estimating costs for BY 2005.

11 **III. Conclusion**

12 The standards set by the NNA witnesses for identification of Within-
13 County Periodicals costs amount to a catch-22 for the Postal Service. On the
14 one hand, witness Heath is appreciative that mailers are not required to place
15 markings on pieces that claim Within-County rates. (NNA-T-1 at 9.) Witness
16 Siwek then claims that the Postal Service has no legitimate cost data for Within-
17 County Periodicals, in large part because the unambiguous observable rate
18 markings that the mailers do not want to apply are not present.

19 In fact, the incentive to claim the Within-County rates whenever possible is
20 strong enough to provide a reliable basis for the inferences made in the Postal
21 Service tally edit procedures. The procedures make use of mailing statement
22 data wherever possible to identify actual use of Within-County rates by mailers,
23 and reasonable criteria for the minority of tallies that cannot be linked to mailing

1 statement data. The potential problems identified by the NNA witnesses are
2 minor, and the most significant issue, the “wandering routes” problem, is solvable
3 with minor changes to the IOCS data collection instrument.

4 NNA’s concern with the increase in measured Within-County Periodicals
5 costs from BY 2004 to BY 2005 is understandable, but their proposed remedy is
6 not. The small size of the Within-County subclass precluded specific testing of
7 that subclass. Nevertheless, the redesigned IOCS instrument has been tested
8 far more extensively than its predecessor, and the testing has shown it to be
9 more accurate. In recommending multi-year pooling of cost data, witness Siwek
10 is asking for relief from costing errors he has not demonstrated exist, from a
11 costing system he has not demonstrated is inaccurate. Since the tally edit
12 processes have not changed, pooling the IOCS data does not even specifically
13 address the alleged problems, insignificant as they may be. Therefore, the
14 Commission should continue to employ the accepted method for identifying
15 Within-County Periodicals costs in IOCS.